

REMARKS

Claims 1-5 and 8-11 are pending in this application with claims 2, 3 and 8-11 having been withdrawn from consideration. By this Amendment, claim 1 has been amended and claims 6 and 7 have been canceled. Claim 1 is independent. Reconsideration of the application is respectfully requested.

I. Amendment

Support for the amendment to claim 1 can be found in the specification at, for example, paragraphs [0016] and [0031]. In particular, paragraph [0016] recites, *inter alia*, "[i]n contrast, the FF value in the present invention can be equal to or larger than 0.45, which may be even 0.5 or larger." Paragraph [0031] recites, *inter alia*, "[h]owever, if the FF value is equal to or smaller than 0.85, one can obtain an absolute PBG wider than the conventional theoretical upper limit (i.e. point 43) by appropriately setting r_a ." Thus, no new matter is added.

The subject matter added to claim 1 may appear similar to the subject matter of non-elected claims 6 and 7. However, the amendments to claim 1 are appropriate for at least two reasons. First, the October 18, 2007 Election of Species is unreasonable because Species A-E are not mutually exclusive and are part of the same invention. Applicants timely traversed the Election of Species Requirement. In particular, "the corners are removed along an arc" species is not mutually exclusive of the "area fraction FF is within a range from 0.45 to 0.85" species. See paragraph [0027].

Second, for similar reasons, amending claim 1 to recite the additional features should be permissible, although the additional features may be similar to those recited in non-elected claims 6 and 7. In particular, the additional features are not mutually exclusive to the elected species.

Accordingly, consideration of claim 1 is respectfully requested.

II. Rejection Under 35 U.S.C. §112, Second Paragraph

The Office Action rejects claim 1 under 35 U.S.C. §112, second paragraph. Claim 1 has been amended to obviate the rejection. Accordingly, withdrawal of the rejection is respectfully requested.

III. The Claims Define Patentable Subject Matter

The Office Action rejects claim 1, 4 and 5 under 35 U.S.C. §103(a) over Japanese Patent Publication No. 2002-084037 to Tatsuya. This rejection is respectfully traversed.

Independent claim 1 recites, *inter alia*, "an area fraction FF of the modified refractive index areas in the body is equal to or larger than 0.5 and is equal to or smaller than 0.85." The applied reference fails to teach or render obvious the recited features of independent claim 1.

Page 5 of the Office Action recites that "[t]hough 'enhanced' without actual range/value would be indefinite to compare the prior art area FF range with that of the 'enhanced,' noting that as stated by the Applicant such value is as high as 0.5 in the prior art."

However, as explained below, the applied reference does not teach or render obvious that the FF value is 0.5 or larger. The specification clearly states, when referring to prior art reference "Non-Patent Document 1," "the construction in Non-Patent Document 1 does not allow the FF value to be equal to or larger than 0.5."

The specification also recites, when referring to prior art reference "Non-Patent Document 1," that "the FF value practically needs to be equal to or smaller than 0.45." See Fig. 1(b) and paragraph [0010] of the specification. Please note that the FF number range recited in claim 1 does not overlap the range specified in paragraph [0010].

Furthermore, Tatsuya fails to disclose an FF value. Based on the diameter and cycle disclosed by Tatsuya, the FF value is significantly less than 0.5 (the Max FF is approximately 0.48 according to our calculations), when the diameter is 200 nm and cycle is

250 nm. See paragraph [0064] of Tatsuya. Thus, Tatsuya fails to teach or render obvious an area fraction FF of the modified refractive index areas in the body is equal to or larger than 0.5 and is equal to or smaller than 0.85.

The dependent claims are patentable at least due to their dependence on allowable independent claim 1 and for the additional features that they recite.

Accordingly, withdrawal of the rejection of the claims is respectfully requested.

IV. Rejoinder

It is respectfully requested that withdrawn claims 2, 3 and 8-11 are rejoined upon the allowance of independent claim 1.

V. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-5 and 8-11 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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